

# Basic training

**REC Ver.34**

# EHS Policy

TowerJazz is committed to the Environmental, Health and Safety Policy of our facilities. The safety and prevention of injury and ill health of our employees, the surrounding community and environment has been a safe and productive operation and continues to be an essential element of our operations. We are all expected to conduct business in a safe and efficient manner and to adhere to all safety policies and procedures. We also strongly believe that good environmental management is an important part of our overall business strategy.

To this end, the company affirms its commitment to meeting the following objectives:

- Prevent accidents, injuries and ill health – Identify and unsafe acts and/or conditions
- Continuously improve the Health and Safety of the work environment
- Provide job training and effective feedback
- Emphasize individual responsibility for Health & Safety Awareness by all employees and contractors
- Meet the applicable local, state and federal Occupational Safety and Health standards
- Commit to meeting and monitoring the environmental regulatory requirements that apply to our business
- Commit to define and accomplish environmental objects and targets
- Commit to conserving natural resources and pollution prevention
- Commit to continuous improvement in all our environmental aspects and taking appropriate actions when necessary
- Emphasize individual responsibility for environmental awareness by all employees and contractors
- Collaborate with relevant authorities, customers, suppliers and interested parties to ensure relevant environmental aspects are addressed
- Consider the impact of our actions on the environment during business planning, design, execution, manufacturing, new process introduction and facility upgrades

# Safety policy summary

- 1. Comply with all related raw and regulations**
- 2. Minimum safety expectations are provided for all team members**
- 3. Implement continuous improvement (PDCA )**
- 4. Prevent potential work-related accidents and injuries**
- 5. The safety of people conducting work at our sites to be of primary importance**
- 6. Minimum safety expectations are also provided to independent contractors**

# General Awareness of Health and Safety

**All workers work at our Fab must comply with law and regulations**

**To be able to maintain Safe and healthy work place**

**To be able to accomplish no accident work place and improve productivity**

**【Examples of regulations have to be complied】**

- ① Wear ear plugs in noise producing area  
⇒if you don't, it might cause hearing disability
- ②Wear appropriate PPE to handle hazardous chemical  
⇒if you don't , it might cause chemical exposure for skin, eyes

# Recognition of Risk

## —Step of Risk Recognition—

### 1. Recognize risk factor

To be able to prevent accident by recognizing the risk factor in work places

### 2. Control risk factor

The recognized risk factor has to be controlled to prevent the accident

### 3. Improve continuously to minimize the risk

Work environment has to be improve continuously to prevent any accidents

☆Our company considers the safety of people conducting work at our sites to be of **primary importance**  
(EHS policy)

# Red Flag = Prohibition tag

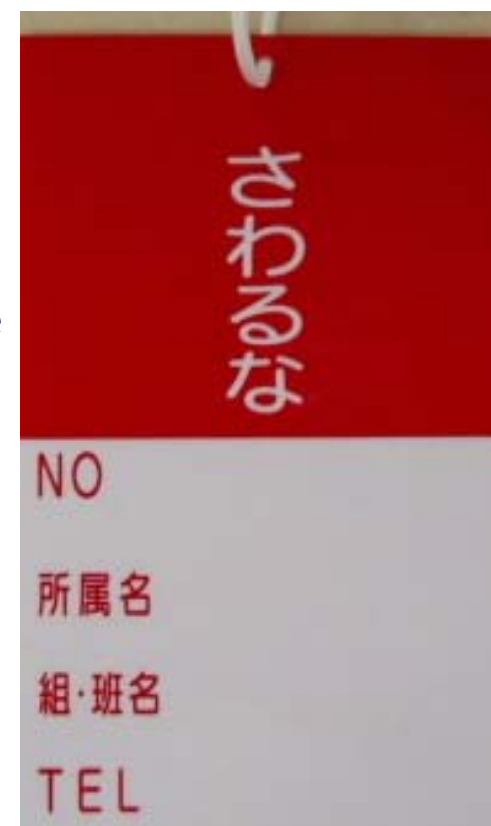
(Energy Isolation)

We use Red Flag for energy isolation in Our Fab.

■ Don't touch valve or switch if there is red flag

■ Don't remove any flags beside you are using

Please ask host or safety coordinators for detailed instructions of red flag before use



## Other flags used in our Fab

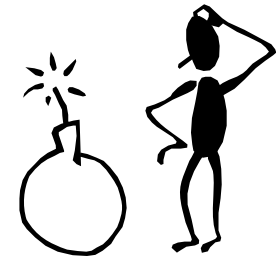


Please ask host or safety coordinators for detailed instructions before you use

# Electric Safety

**Electric is invisible but it could cause "electrification" or "fire"**

- ① Confirm **contact pressure** before inserting a plug in into a socket (it must have contact pressure)
- ② Insert a plug properly
- ③ Use appropriate capacitance  
-Typically **1500W** is maximum load
- ④ Don't bare live part
- ⑤ Don't use depleted cord or insulation damaged code
- ⑥ Don't use many loads on one electrical outlet
- ⑦ Wiring work must be done by eligible
- ⑧ Check power voltage with **tester or detector** before electric work



# Exposure Control

## Chemical exposure

Chemical handler must be familiar with the character, risk, coping strategy of handling material before use.

### MSDS (Material Safety Data Sheet)

**MSDS include chemical's environmental and health impact, practice of leakage and fire, regulations, chemical / physical characterization issued by manufacturing.**

## Physical exposure

Health disturbance caused by energy or noise must be prevented, using PPE such as;

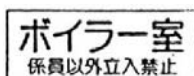
- wear appropriate goggle for laser
- wear ear plug for noise producing area ( greater than 85db)

# Safety Label

These safety label are to prevent potential work-related accidents and injuries.



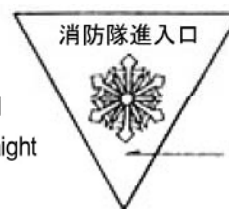
ELECTRIC ROOM  
Authorized personnel only



BOILER ROOM  
Authorized personnel only

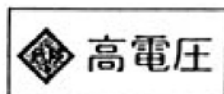


DANGER  
LASER BEAM  
Don't look straight  
at the beam!

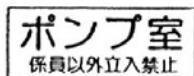


Firefighters Entrance

此の付近に物を置かないで下さい。  
Area to be cleared at all times.



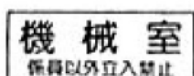
DANGER HIGH VOLTAGE



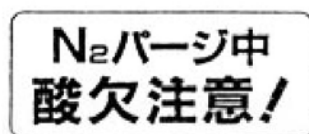
PUMP ROOM  
Authorized personnel only



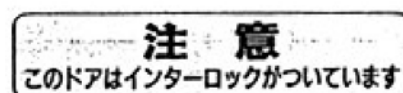
Beware not to have your fingers caught.



MACHINE ROOM  
Authorized personnel only



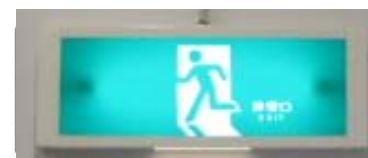
N<sub>2</sub> PURGING  
Beware of oxygen deficiency!



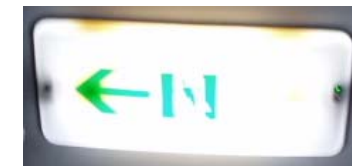
CAUTION  
This door has an interlock system



DANGER  
Inflammables! No Fire!



Emergency exit



Direction of  
emergency exit



Evacuation Route

# Safety Shower and Hand Shower

Please wash immediately more than 15 minutes , if you are exposed to any chemical. Then please dial internal 9000!

Shower head

Handle

hand lever

Please check location  
of safety shower before  
you handle any  
chemicals.



Safety shower



Hand shower

# Personal Protective Equipment (PPE)

1. Wear fitted work uniform
  2. Wear work uniform properly
  3. Wear **safety shoes and a helmet** for handling heavy load
  4. Wear **helmet** if there is risk of something come down from above
  5. Wear **appropriate safety goggle** for handling laser, dust, chemical
  6. Wear ear plug in noise producing area (greater than **85 dB**)
  7. Wear **goggle and gloves** for handling acid and alkalis
- 
- ※1 Wear long sleeve work uniform and safety shoes and helmet for entering **plenum** ( 2F in mechanical building)
  - ※2 Wear long sleeve work uniform for engineering work or carrying equipment
  - ※3 Confirm dust/gas mask has JIS certification before use

# Examples of PPE



Safety glasses



goggle



Face shield



SCBA



Antidust  
mask



Antidust  
mask  
※disposable



Gas mask



Gas mask  
※disposable

# Noise Producing Area

- Work places that produce noise greater than **85 db** equivalent sound level
- Workers in this must wear **ear plugs** (Please confirm with host or safety coordinators for area)

## Affected area

F1 plenum (CVD area)

F2 No1, No2 pump area

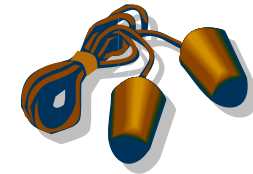
FAC mechanical building : cooling machine, Compressor, boiler room, dynamo room,  
No. 7 pump room, around 5/6 air dryer

FAC F1: Acid SRB room

FAC F2: SRB room, 11 air-conditioning machine room,

F2 1F : C2 PCW area

FAC adscription : N2buil 1F, pump building (2)



# Fall Protection

For working High work place (higher than **2m**) must have

- 1) Wear safety belt and helmet
- 2) Lookout man
- 3) Sign of "under the operation"



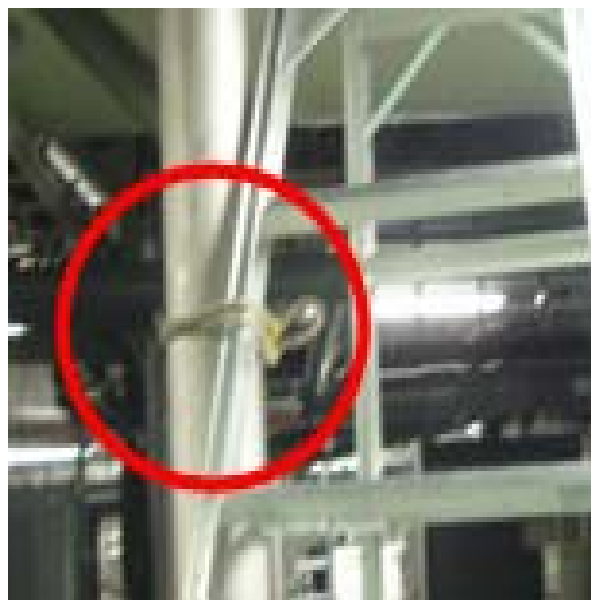
## <NOTE>

- **Don't step on top panel of stepladder**
- Keep only necessary tool, take some measure to prevent dropping tools
- Don't use same stepladder with other worker



# Fix Stepladder

Stepladders in photos are stable since it is tied to stakes.



# Example of stepladder sign



“Don't step above this sign”



Don't step on  
the top panel

# Example of stepladder work



Must have supporter for higher than 2m

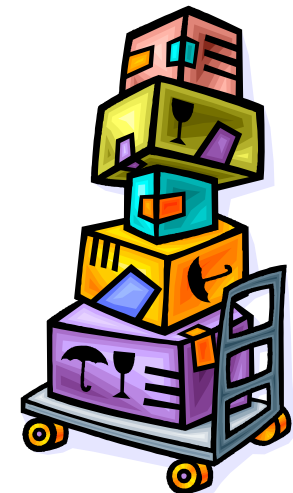


# Bad Example



# Use of Carriage

- 1. Load must be balanced and under slung**
  - 2. Don't carry over weight**
  - 3. Push the carriage, don't pull**
  - 4. Strap load**
- ★ Power vehicle must be driven by eligible  
Ex; crane, forklift



# 5S

5S stands capital letters of following 5 words ;  
**Seiri**(Tidy), **Seiton**(Arrangement),  
**Seisou**(Clean up), **Seiketsu**(Clean),  
**Shukanka**(conventionalize).

- ① **Seiri**-Tidy            Dispose unnecessary material
- ② **Seiton**- Arrangement        Arrange orderly
- ③ **Seisou**-Clean up        Clean every time after a job
- ④ **Seiketsu**-Clean
- ⑤ **Shukanka**- conventionalize    You have to conventionalize ①-④ activities



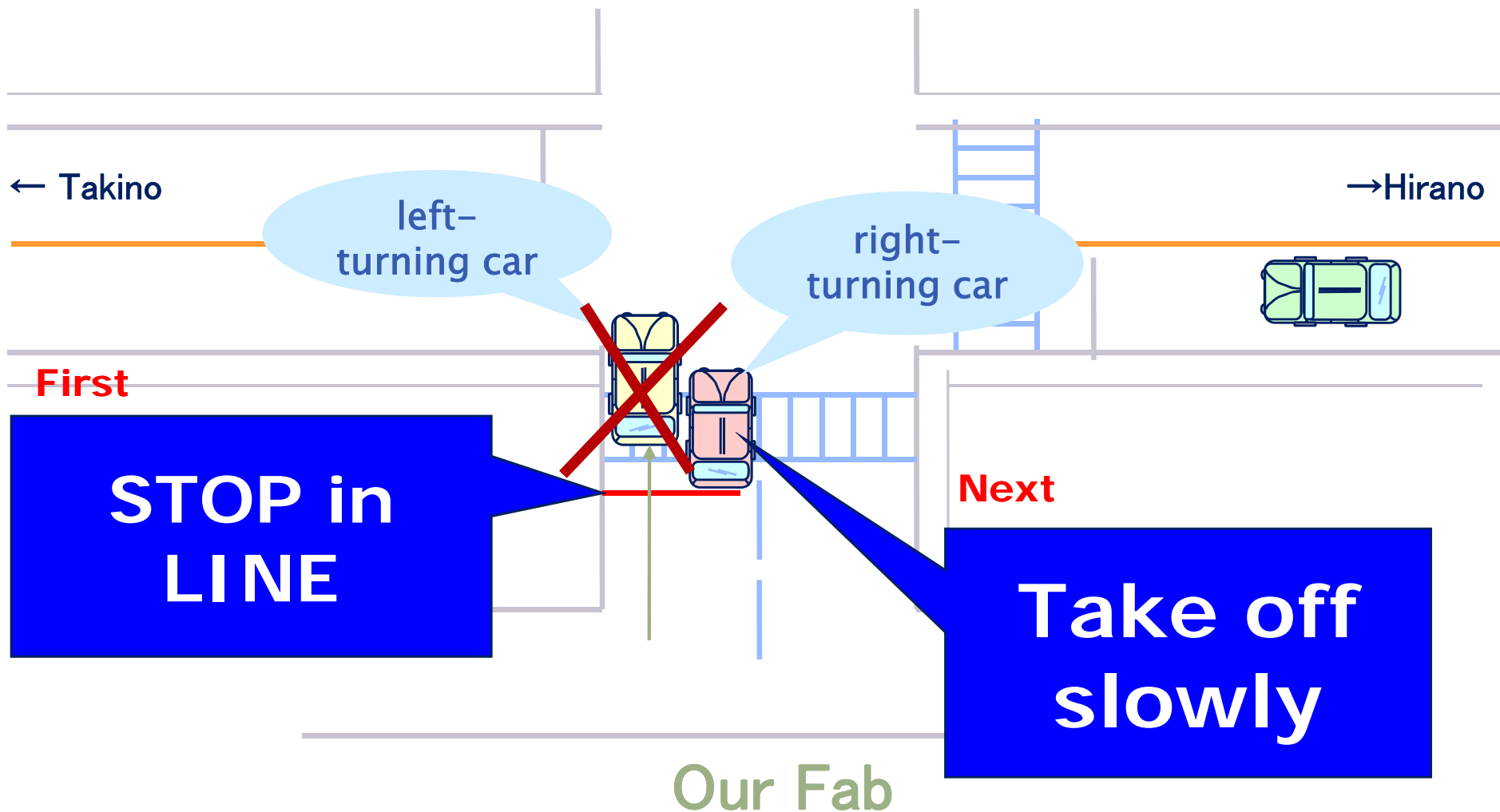
# Behavior Observation system

We observe your safety manner.  
If you do following unsafe behavior, we will issue "**RED CARD**" to your company and require appropriate measures to correct it.

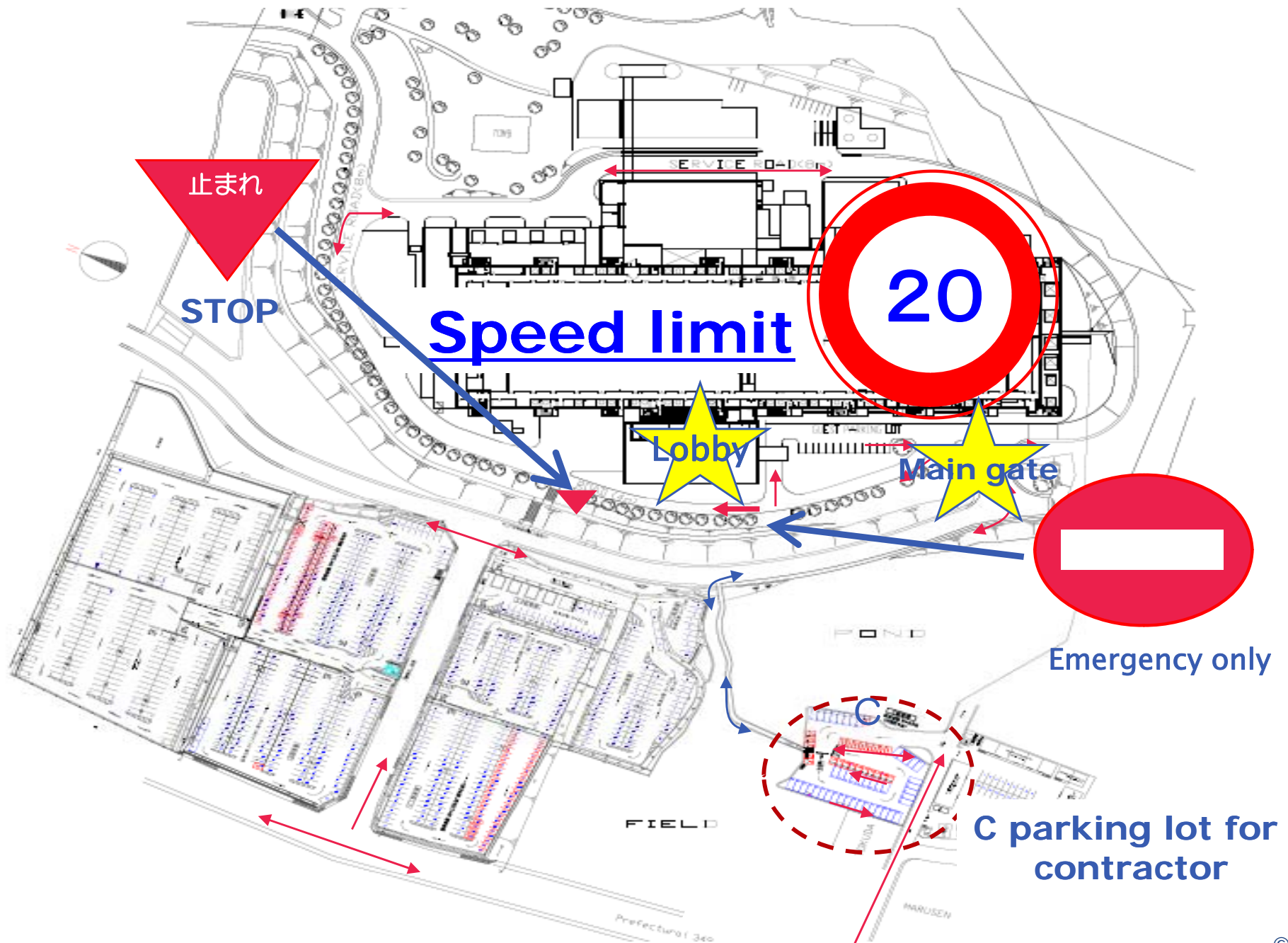
1. Operate without red flag
2. Operate without curing opening
3. Operate on the top panel of stepladder
4. Operate 2 workers in top and down
5. Operate without safety belt in high work place
6. Operate under hanging load of forklift and such

# Traffic safety: Intersection

## Stay in line!



# Traffic Safety Rule

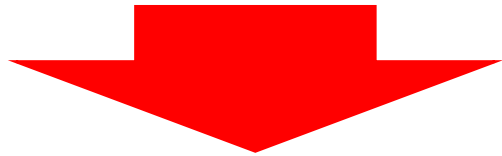


# Emergency Response

Emergency Response Team = ERT

IF you find emergency situation

Commander badge



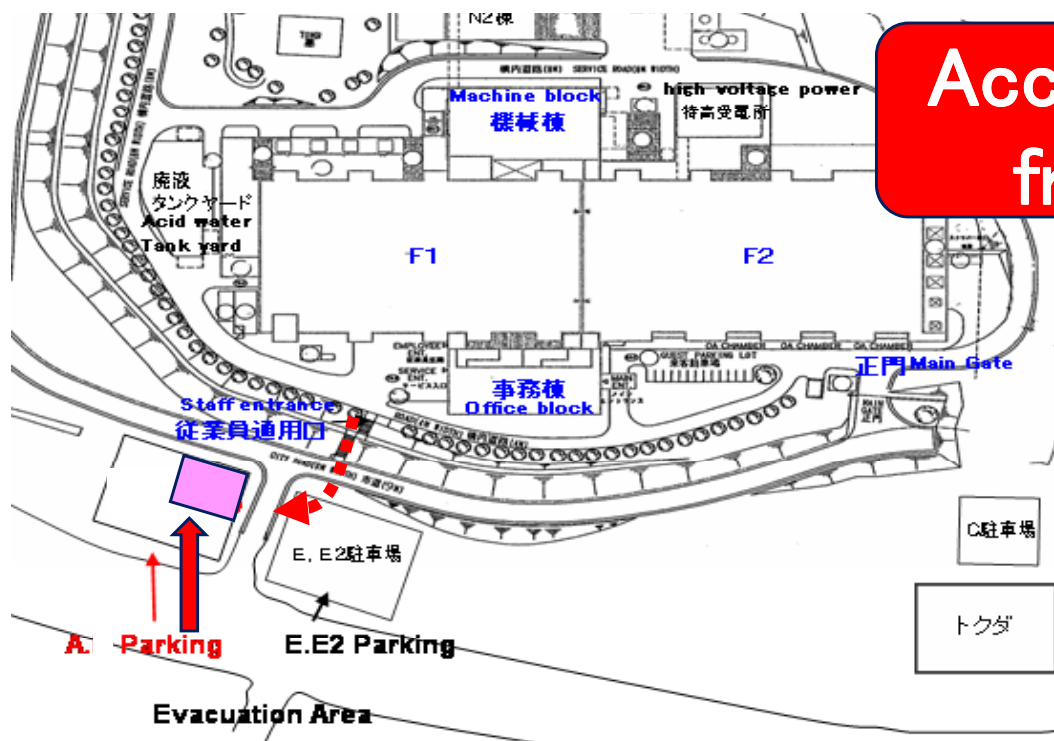
**Call (Internal) 9000 !**  
**(External) 0795-23-6816**



- ERT commander has all authority to command in emergency situation
- Follow ERT member in emergency situation
- For medical emergency, please make sure victim is in safe area until ERT arriving

# Evacuation

## ① Evacuate to A parking lot for fire evacuation alarm



Access to A parking lot  
from closest exit !

Contact ERT for  
missing members

## ② Follow the broadcasting for chemical/gas leakage evacuation



# Blood Born Pathogen

- Consider all materials contaminated with blood or any body fluid is **contagious**
- **Don't touch** blood with bare hand
- Call (internal) **9000** for following situation  
(ex) **0795-23-6816**
  - Bleed or vomit in workplace
  - Find anybody who is bleeding or vomiting in work place
  - Find blood or vomit in work place



# Environmental Rule

Please follow rules to prevent environmental  
prolusion !!

- 1 Don't dispose polluted fluid or waste chemical in rain water dike.
- 2 Bring packing material, ended material back.
  - ❌ Please dispose removed waste material in appropriate place.
- 3 Please segregate and dispose empty can for dinks in appropriate place.
  - ❌ Don't dispose them in industrial waste box.

# Electrostatic discharge

- To maintain the manufacturing-quality,  
We do ESD controls.

- Please wear
- Please follow



# PPE for Plenum

No need clean glove in plenum.

Note : Have to use various glove which is certified by us with work.



Don't use a dusting characteristic glove's such as cotton work glove's



Clean glove



Rubber glove



Leather glove

# PPE for Plenum

Don't wear a dusting characteristic cloth such as sweater



Don't use boa



Don't wear a sweater

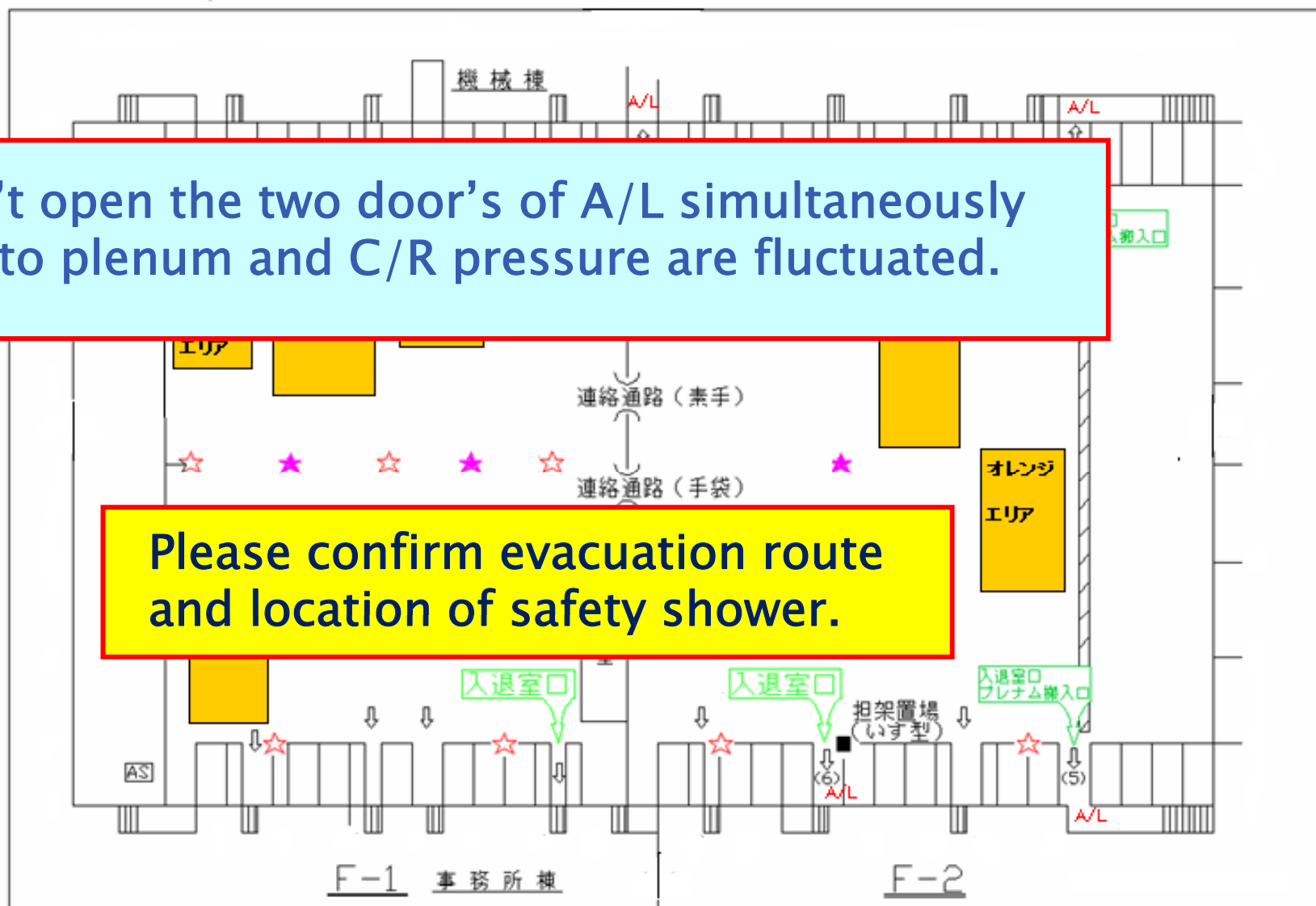
# Enter or leave a Plenum



[F-1,2 プレナム略図]

- ★ …フルシャワー
- ☆ …ハンドシャワー
- ▮ …階段
- ↑ …非常出

Don't open the two door's of A/L simultaneously due to plenum and C/R pressure are fluctuated.



Please confirm evacuation route and location of safety shower.

# Enter or leave a Plenum

There are two types of door knob in plenum, for gloves and bare hands

Be careful because door knob for gloves might be exposed to chemicals.



Please confirm a poster on the door “For bare hands” and “For gloves” !

# Cleanliness

## Restriction items



Drawings and memo pad can be used regular paper.

Ballpoint pen



Highlight pen



Pencil



Don't bring in ignition source



Cardboards



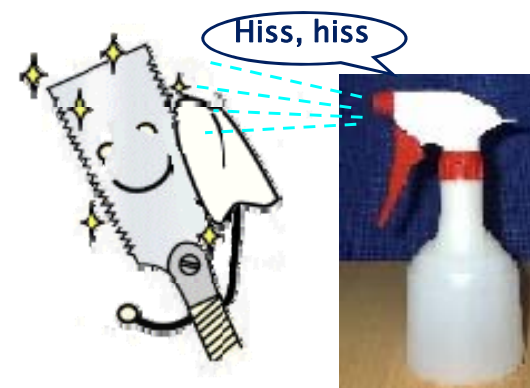
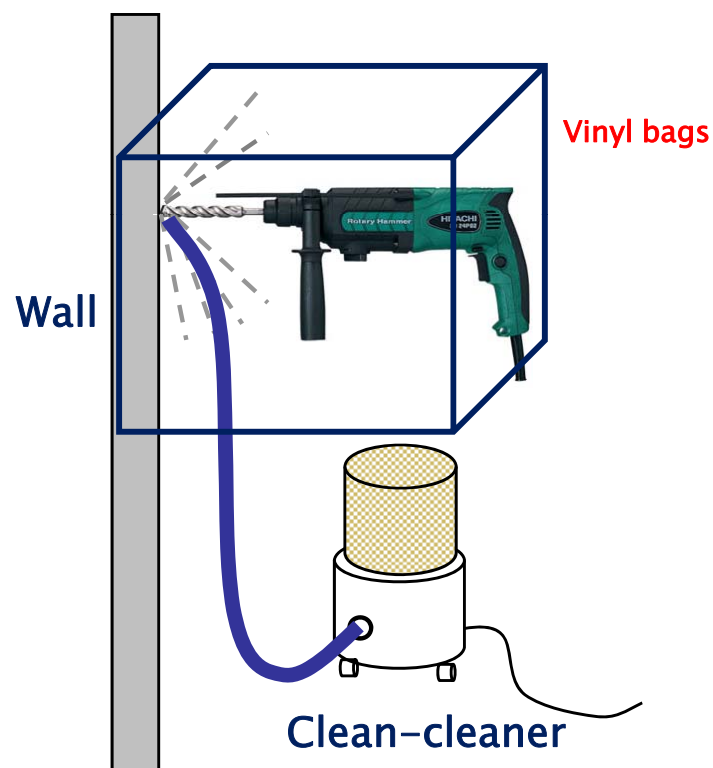
Wood chips

Don't use a dusting characteristic goods

# Cleanliness

Don't work such as Gas/Electric welding, drill a hole, grinder, etc.  
 ※ Have to be clean-up a tools by IPA (<5%).

Have to covered with vinyl bags by necessity

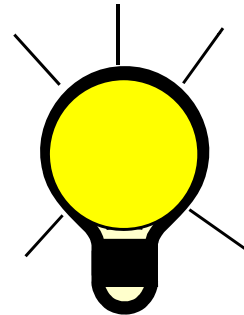


# Lightings

**Be careful !!**

**Lightings are Turn-off automatically during  
20:00~8:00.**

**Please Turn-on the lightings manually when  
needed.**

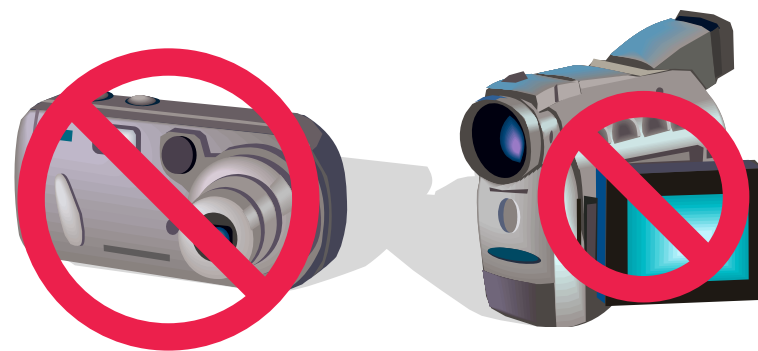


# Security rule

- Don't walk into **special area without permission**
- Wear ID card on your chest **all the time** in our Fab
- **Don't hold or damage** ID card
- Please receive ID card in main gate and give it back when you leave
- Please fill the form when you enter and leave
- Must have escort if your ID card doesn't have photo
- **NO Photo or Recording in any place at our Fab**



※NO photos  
NO Recording



# Guideline for bringing PC into

## To bring PC in our Fab

- To bring your PC in our Fab, you need to get the permission from IS dept. We do not allow to use your PC inside our Fab without the certificate.
- You can bring your PC in with the certificate, but we do not allow to connect our internal network.

## Issue of the certificate

- The expiration date is less than 7 days.
- Below conditions are confirmed.
  - 1. Anti Virus application is installed and executed
  - 2. Real-time scan is activated
  - 3. Present a result of virus scan by the latest definition file that performed in 24 hours (such as a screen shot)



# Guideline for bringing PC into our Fab

## Use of more than 7 days duration

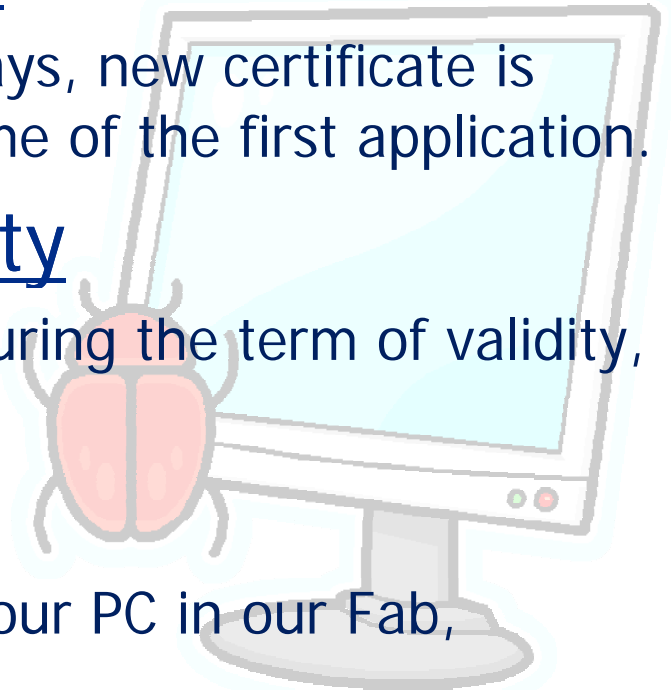
- When you want to use your PC beyond 7 days, new certificate is required with the same procedure as the time of the first application.

## Re-entry during the term of validity

- When you bring your PC in our Fab again during the term of validity, please show the certificate at gate.

## Return of a certificate

- When it is no longer necessity of bringing your PC in our Fab, please return your certificate at gate.



# Confidential agreement

## All visitors must sign on Confidential agreement

1. Not to disclose any information of our company. Obtained through our business with your company or my visit to your company to any third person ,firm or company.
2. I shall have no obligation if the information stated in 1. above,
  - i . is already publicly known; or
  - ii . becomes publicly known through no wrongful act of our; or is approved for release by written authorization of our company before the release.
3. To comply with your company's working rules and instructions, and to cooperate with you to maintain company's safety and good order.

End of File